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13. ABSTRACT *(Maximum 200 words)*

Steven Rizk is involved in continuing the work that was proposed under the AASERT program. First, he has worked on developing the Vector Spherical Harmonic (VSH) model by including it in a WWW interface that can be accessed easily from any web browser. Second, he developed a set of interfaces that enabled us to compare the VSH model with radar data

Mr. C. Bunto has been developing a version of the NCAR-TIGCM that includes high latitude inputs from the IZMEM convection model.

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AASERT EVALUATION REPORT

SUPPLEMENTARY AASERT ADDITION TO DOD-F196288-89K-0 (PHILLIPS LAB.)

The amount of funding for the parent agreement and the number of full time graduate students supported by the parent agreement during the 12 month period prior to the AASERT award: The parent grant was not funded in the 12 month period prior to the time of this report; the number of full-time graduate students supported under the parent award during this period was 0.

The amount of funding for the parent agreement and the number of full time graduate students supported by the parent agreement during the 12 month period after to the AASERT award: The number of full-time graduate students supported under the parent award in this period was 0; the amount of funding was $0.

The amount of funding and the number of full time graduate students and undergraduate students provided for in the AASERT agreement during the 12 month period prior to the AASERT award: The number of full-time students supported by the AASERT award was 2.

Both graduate students, Mr. S. Rizk and Mr. C. Bunto, are United States Citizens.

Technical Report on DoD grant F49620-93-1-0325 to the University of Michigan on S. Rizk.

Steven Rizk is involved in continuing the work that was proposed under the AASERT program. He was brought into the program in the middle of the year as a replacement for Mr. Trevor Garner, who elected to continue his studies elsewhere. Mr. Rizk has been involved in a variety of work related to that proposed under the AASERT augmentation.

First, he has worked on developing the Vector Spherical Harmonic (VSH) model by including it in a WWW interface that can be accessed easily from any web browser. To do this he developed a web site on our local machine and adapted our existing graphics to work from the web site. This involved developing script files and altering the graphical interface.

Second, he developed a set of interfaces that enabled us to compare the VSH model with radar data. This development was designed to enable us to compare VSH results and General Circulation Model (GCM) results with actual measurements. It was intended to use these viewers as part of a real-time campaign, during which the model would be run using "nowcasts" of the appropriate geophysical inputs. The first such campaign was recently completed. The technique was successful, with the model being run for 3 days in conjunction with the Incoherent Scatter Radars at Søndrestrømfjord, Greenland, Millstone Hill, MA., and Kiruna, Norway. In addition simultaneous measurements were made using the SuperDarn radars at Saskatoon, Saskatchewan, Kapuskasing, Ontario and Goose Bay, Newfoundland and using the Riometer at Søndrestrømfjord, Greenland.

Technical Report on DoD grant F49620-93-1-0325 to the University of Michigan on Mr. C. Bunto.

Mr. Bunto has addressed another aspect of the problem that was considered by Mr. Rizk. We have been concerned that the high latitude inputs used by the VSH model are not of sufficient accuracy to aid in the prediction of the thermospheric response to changing geophysical inputs. Thus we felt the need to include more accurate inputs to the original model runs, which could then be used to develop an improved VSH model which included such inputs as changes in IMF.

To this end Mr. Bunto has been developing a version of the NCAR-TIGCM that includes high latitude inputs from the IZMEM convection model. This latter model using IMF measurements to obtain a prediction of the actual convection pattern that occurs at high latitudes. Mr. Bunto's job has been to adapt this empirical model to the numerical schemes used in the NCAR-TIGCM.